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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,895	11/16/2000	Karel Smuk	951/49163	9615

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CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
Washington, DC 20044-4300

EXAMINER	
TRAN, DZUNG D	
ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/623,895	SMUK ET AL.	
	Examiner	Art Unit	
	Dzung D Tran	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 6-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In the amended independent claims 6 and 7, the newly added limitations "determining a value of said first electrical output signal and outputting a second electrical signal as an error signal when said value of said first electrical signal is less than a predetermined value during a period of time when there is an absence of an input optical signal from said one node" is not described in the specification or shown in the drawing.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 6-7 (as far as understood) are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent no. 5,859,716 to O'Sullivan et al (hereinafter O'Sullivan).

Regarding claim 6 (as far as understood), O'Sullivan discloses a communication arrangement for connecting together a plurality of nodes (60 and 70 of Fig. 1), said arrangement comprising: at least one opto-electronic transducer (33 of Fig. 2) each connected to one of said plurality of nodes (via 10, 20, 30 and 40 of Fig. 1), each transducer including a means for generating an electrical output signal in response to an optical input signal from one of said nodes (Col. 5, lines 60-67); and a second means (8 of Fig. 2 or 66 and 69 of Fig. 3) for determining a value of said electrical output signal, wherein said second means outputs a second electrical signal as an error signal (e.g. 40 or 58 of Fig. 1) when said relative value of said electrical signal is less than a predetermined value (Col. 5, line 66 to Col. 6, line 17, Col. 6, lines 52-54, Col. 7, lines 25-48).

Regarding claim 7 (as far as understood), O'Sullivan discloses all limitations as discussed above, and further discloses determining a value of said electrical output signal (e.g. by determining the ratio of energy); comprising said value to a base value (e.g. by comparing the received dither with transmitted dither); and outputting an error signal when said relative value is less than said base value (e.g. by recognizing a fault, Col. 12, lines 49-60).

5. Claims 6-10 (as far as understood) are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent no. 5,617,238 to Bogdan et al (hereinafter Bogdan).

Regarding claim 6 (as far as understood), Bogdan discloses a communication arrangement (Fig. 3) for connecting together a plurality of nodes (e.g. 20, 200, 210, 70, 250, 160 and 170), said arrangement comprising: at least one opto-electronic transducer (20) each connected to one of said plurality of nodes, each transducer including a means for generating an electrical output signal in response to an optical input signal from one of said nodes (Col. 1, line 58 to Col. 2, line 5); and a second means (e.g. 40) for determining a value of said electrical output signal, wherein said second means outputs a second electrical signal as an error signal (e.g. DIDO4) when said relative value of said electrical signal is less than (i.e. below receiver threshold level) a predetermined value (Col. 6, lines 32-40).

Regarding claim 7 (as far as understood), Bogdan discloses all limitations as discussed above, and further discloses determining a value of said electrical output signal (e.g. 220); comprising said value to a base value (e.g. by comparing corresponding digital electrical signal generated by 120, Col. 7, line 65 to Col. 8, line 4 or by threshold voltage commanded by 70, Col. 10, lines 65-67); and outputting an error signal when said relative value is less than said base value (e.g. by detecting error in the eye diagram, Col. 11, lines 34-46).

Regarding claims 8-10, Bogdan discloses wherein said error signal is stored in a memory and the step of reading out a status of said memory element is addressable (via GPIB and DIDO4 of 70, 80 and 90 of Fig. 3).

6. Claim 6 (as far as understood) is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent no. 6,259,704 to Asahina et al (hereinafter Asahina).

Regarding claim 6 (as far as understood), Asahina discloses a communication arrangement for connecting together a plurality of nodes (Fig. 9), said arrangement comprising: at least one opto-electronic transducer (211 of Fig. 19) each connected to one of said plurality of nodes, each transducer including a means for generating an electrical output signal in response to an optical input signal from one of said nodes (Col. 8, lines 60-64); and a second means (102, 103 and 105 of Fig. 10) for determining a value of said electrical output signal, wherein said second means outputs a second electrical signal as an error signal (e.g. by detecting input signal level abnormal signal, Col. 9, lines 47-64) when said relative value of said electrical signal is less than (i.e. below receiver threshold level) a predetermined value (e.g. depending upon error condition via 351 of Fig. 12, Col. 10, lines 12-22).

7. Claims 6-8 (as far as understood) are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent no. 6,025,946 to Miyamori et al (hereinafter Miyamori).

Regarding claim 6 (as far as understood), Miyamori discloses a communication arrangement (Fig. 24) for connecting together a plurality of nodes (e.g. 301-304), said arrangement comprising: at least one opto-electronic transducer (8a) each connected to one of said plurality of nodes, each transducer including a means for generating an electrical output signal in response to an optical input signal from one of said nodes (Col. 9, lines 46-59); and a second means (e.g. 58 of Fig. 14 or 91, 92 and 93 of Fig. 17) for determining a value of said electrical output signal, wherein said second means

outputs a second electrical signal as an error signal (e.g. abnormality signal) when said value of said electrical signal (e.g. count value of counter 91 and 92) is less than a predetermined value (Col. 23, lines 57-61).

Regarding claim 7 (as far as understood), Miyamori discloses all limitations as discussed above, and further discloses determining a value of said electrical output signal (e.g. by checking count value); comprising said value to a base value (e.g. by comparing count value of 91 and 92); and outputting an error signal when said relative value is less than said base value (e.g. if counter 91 deviates from count value of counter 92 or judges if that the difference between these two counters is within predetermined error, Col. 23, line 61 to Col. 24, line 4).

Regarding claim 8, Miyamori discloses wherein said error signal is stored in a memory (memory inside counter 91, 92 and 93).

8. Claims 6-10 (as far as understood) are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent no. 5,541,759 to Neff et al (hereinafter Neff).

Regarding claims 6-7 (as far as understood), Neff discloses a communication arrangement for connecting together a plurality of nodes (Fig. 1a and 1b), said arrangement comprising: at least one opto-electronic transducer each connected to one of said plurality of nodes, each transducer including a means for generating an electrical output signal in response to an optical input signal from one of said nodes (via 220L and 506L of Fig. 5); and a second means (526) for determining a value (e.g. marginal received optical power) of said electrical output signal, wherein said second means outputs a second electrical signal as an error signal (e.g. via setting warning latch) when

said value of said electrical signal is less than a predetermined value (e.g. by comparing the actual pulse width with expected pulse width to determine the magnitude of pulse width distortion, Col. 9, lines 38-56).

Regarding claims 8-10, Neff discloses wherein said error signal is stored in a memory and the step of reading out a status of said memory element is addressable (Fig. 8c and 9c or via 240a and 240b of Fig. 2).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Sullivan in view of US Patent no. 5,418,785 to Olshansky et al (hereinafter Olshansky) or US Patent no. 4,731,880 to Ault et al (hereinafter Ault).

Regarding claims 8-10, O'Sullivan does not discloses wherein said error signal is stored in a memory, the step of reading out a status of said memory element is addressable. Olshansky discloses wherein said error signal is stored in a memory, the step of reading out a status of said memory element is addressable (Fig. 2 and Col. 4, lines 10-68). Likewise, Ault discloses wherein said error signal is stored in a memory, the step of reading out a status of said memory element is addressable (via 130 of Fig.

1, Col. 2, lines 7-64, Col. 5, lines 1-63). Accordingly, one of ordinary skilled in the art would have been motivated to employ the above means for monitoring the network for error conditions and responding to a detected error condition to inhibit transmission (Col. 2, lines 17-22, Ault). Therefore, it would have been obvious to one of artisan skilled in the art at the time the invention was made to modify the optical transmission system of O'Sullivan by incorporating the above means because this provides for monitoring the network for error conditions and responding to a detected error condition to inhibit transmission as taught by Ault.

Response to Arguments

11. Applicant's arguments filed on 06/23/2004 have been fully considered but they are not persuasive.

In the amended independent claims 6 and 7, the newly added limitations "determining a value of said first electrical output signal and outputting a second electrical signal as an error signal when said value of said first electrical signal is less than a predetermined value during a period of time when there is an absence of an input optical signal from said one node" is not described in the specification or shown in the drawing.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. R. Sedighian

DT
12/23/2004

M. R. SEDIGHIAN
PRIMARY EXAMINER